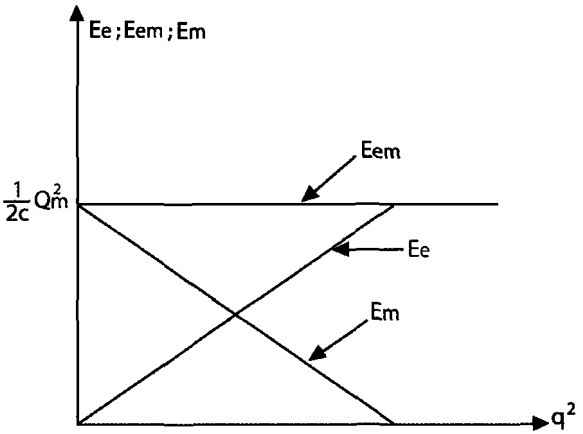
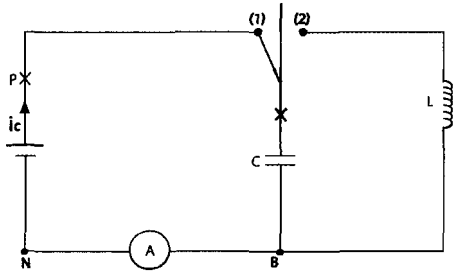
la forme $a'x^2 + b$.

b-



3

I/ Commutateur à la position ① :



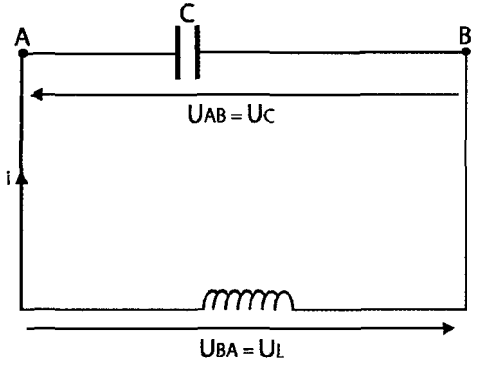
$Q_{max} = Q_0 = CU_{C_{max}} = C \times E$

$E_e = \frac{1}{2}\frac{Q_0^2}{C} = \frac{1}{2}Cu^2_{max} = \frac{1}{2}CE^2$

II/ 1) $q = q_A$

La loi des mailles

$u_{AB} + u_{BA} = 0$



$\frac{q_A}{C} - e = 0$ $\quad \begin{cases} e = -L\frac{di}{dt} \\ i = \frac{dq}{dt} \\ \frac{di}{dt} = \frac{d^2q}{dt^2} \end{cases}$

$\frac{q}{C} + \frac{d^2q}{dt^2}L = 0$

$\frac{d^2q}{dt^2} + \frac{1}{LC}q = 0$ de la forme $\frac{d^2q}{dt^2} + \omega_0^2 q = 0$

2) $q = Cu$